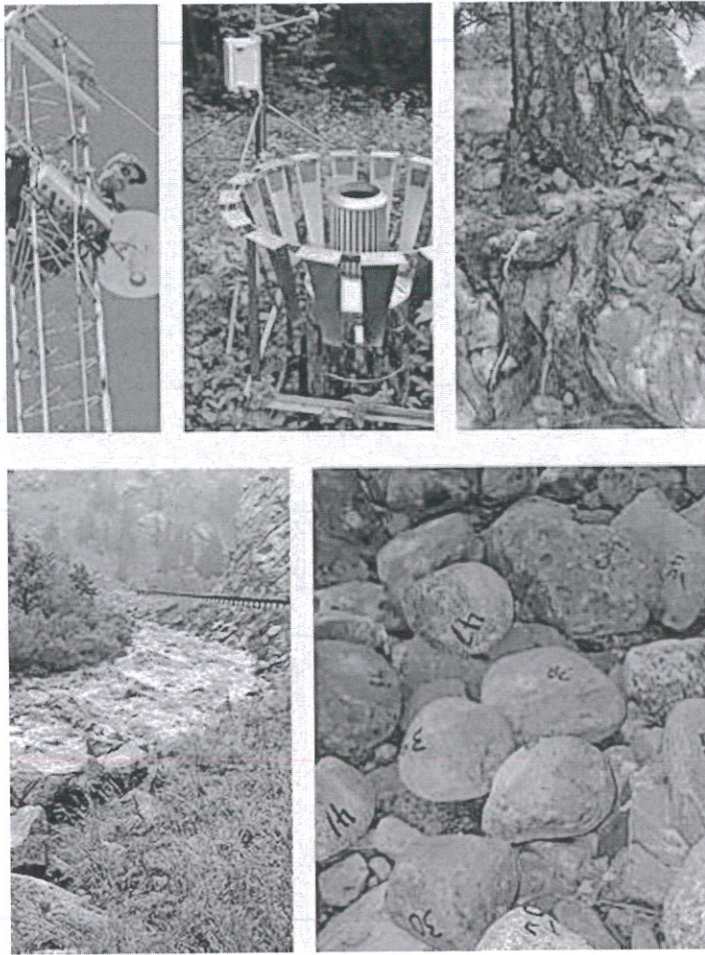


Critical Zone processes operate on second-to-eon timescales



The Critical Zone is imprinted by important events over seconds, hours, years, millenia, and geologic time. The present structure and functioning of the Critical Zone reflects:

- **short-term responses** to events like rainfall and human activities like land-use changes
 - **long-term responses** to climatic and tectonic changes over geologic time
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